

IN THE CLAIMS:

Please amend the claims as indicated below.

1. (Currently Amended) A method for communicating in a time-domain wavelength interleaved network having a hub node, comprising:
transmitting substantially all communications through said hub node without changing a wavelength of said communications at said hub node; and
synchronizing a transmission and reception of a message such that a message sent in a transmitting time-slot k by a node N_i is received by a node N_j in a receiving time-slot k , wherein said synchronizing step is performed by said hub node using a delay from said node N_i to said hub node to determine said transmitting time-slot k .
2. (Cancelled).
3. (Cancelled).
4. (Original) The method of claim 1, wherein said hub node imposes a timing reference.
5. (Original) The method of claim 1, wherein said hub node recovers from a link failure by shifting transmission times of nodes separated from said hub node by said failed link.
6. (Currently Amended) A method for communicating performed by an interior node in a time-domain wavelength interleaved network having a hub node, comprising:
sending substantially all communications received from said hub node having a wavelength indicating said communication is destined for another node on all branches outward from said hub node without changing a wavelength of said communication at said hub node, wherein a transmission and reception of a message are synchronized such that a message sent in a transmitting time-slot k by a node N_i is received by a node N_j in a receiving time-slot k , wherein said

synchronization is performed by said hub node using a delay from said node N_i to said hub node to determine said transmitting time-slot k .

7. (Cancelled).

8. (Cancelled).

9. (Currently Amended) A node in a time-domain wavelength interleaved network having a hub node, comprising:

a tunable laser directed toward said hub node; and

a wavelength dropper for dropping signals having a wavelength associated with said node only from a fiber coming from said hub node, wherein substantially all communications in said time-domain wavelength interleaved network are transmitted through said hub node without changing a wavelength of said communications at said hub node and wherein a transmission and reception of a message are synchronized such that a message sent in a transmitting time-slot k by a node N_i is received by a node N_j in a receiving time-slot k , wherein said synchronization is performed by said hub node using a delay from said node N_i to said hub node to determine said transmitting time-slot k .

10. (Cancelled).

11. (Original) The node of claim 9, wherein said hub node imposes a timing reference.

12. (Original) The node of claim 9, wherein said hub node performs a time-slot scheduling without regard to a delay in said time-domain wavelength interleaved network.

13. (Original) The node of claim 9, wherein said hub node recovers from a link failure by shifting transmission times of nodes separated from said hub node by said failed link.

14. (Currently Amended) A time-domain wavelength interleaved network, comprising:

a plurality of nodes, including a hub node, wherein substantially all communications in said time-domain wavelength interleaved network pass through said hub node without changing a wavelength of said communications at said hub node and wherein a transmission and reception of a message are synchronized such that a message sent in a transmitting time-slot k by a node N_i is received by a node N_j in a receiving time-slot k , wherein said synchronization is performed by said hub node using a delay from said node N_i to said hub node to determine said transmitting time-slot k .

15. (Cancelled).

16. (Original) The time-domain wavelength interleaved network of claim 14, wherein said hub node imposes a timing reference.

17. (Original) The time-domain wavelength interleaved network of claim 14, wherein said hub node performs a time-slot scheduling without regard to a delay in said time-domain wavelength interleaved network.

18. (Original) The time-domain wavelength interleaved network of claim 14, wherein said hub node recovers from a link failure by shifting transmission times of nodes separated from said hub node by said failed link.

19. (Original) The time-domain wavelength interleaved network of claim 14, further comprising a plurality of said nodes interconnected in a tree configuration.

20. (Original) The time-domain wavelength interleaved network of claim 14, further comprising a plurality of trees of nodes, each of said trees having a hub node, each of said hub nodes interconnected in a ring configuration.

21. (New) The method of claim 1, wherein said node N_i is assigned a wavelength λ_i on which other nodes will send signals to said node N_i .

22. (New) The method of claim 6, wherein said node N_i is assigned a wavelength λ_i on which other nodes will send signals to said node N_i .

23. (New) The node of claim 9, wherein said node N_i is assigned a wavelength λ_i on which other nodes will send signals to said node N_i .

24. (New) The time-domain wavelength interleaved network of claim 14, wherein said node N_i is assigned a wavelength λ_i on which other nodes will send signals to said node N_i .